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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,233	08/01/2001	Christian Knopfle	60,500-072	6017
27305	7590	07/01/2004	EXAMINER	
HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101 39400 WOODWARD AVENUE BLOOMFIELD HILLS, MI 48304-5151			PHILOGENE, PEDRO	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/921,233	Applicant(s) KNOPFLE ET AL.	
	Examiner Pedro Philogene	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/29/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,8-12,28-34 and 36-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,8-12,28-34 and 36-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/29/04 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,5,4,6, 8-12,28-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wellisz et al (6,511,482) in view of Hair (6,197,037).

With respect to claims 1, 2, 4, 6, 8 12, 28-43 Wellisz et al disclose a self-retaining implant for attaching a bone cover or a bone fragment to a skull, the implant (120) comprising a support element (121) having an upper side and a lower side, the lower side for facing a surface of the bone cover or the bone fragment; as best seen in FIG.10; and an extension (223) extending from the lower side of the support element in such a manner that the support element and the extension form a T-shaped structure; as best seen in FIG.10; and supporting therefrom at least one spike (223a) toward the bone cover or bone fragment and can be driven laterally into the bone cover or bone

fragment; as best seen in Fig. 10; wherein the support element comprises two support arms; as best seen in FIG.10, extending in opposite direction from the extension (223) the first of the two support arms cooperating with the skull and the second of the two support arms cooperating with the bone cover or bone fragment ; as set forth in column 5, lines 41-67, column 6, lines 1-31.

It is noted that the spike of Wellisz et al did not extend substantially parallel to the support element, as claimed by applicant. However, Wellisz et al teach of a spike forming an angle of 45 degrees instead of an angle of 90 degrees to make the support and the spike parallel; as claimed by applicant. But, it would have been obvious to one having ordinary skill in the art at the time the invention was made to reach the 90 degrees angle, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, USPQ 233; or discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Furthermore, it is noted that Wellisz did not teach of an extension including an end remote from the support element, the extension extending substantially at a right angle, and substantially straight between the support element and the end; as claimed by applicant. However, in similar art, Hair evidences the use of a device for joining bone portions having an extension including an end remote from the support element, the extension extending substantially at a right angle, and substantially straight between the

support element and the end to promote better bone healing and lessening cosmetic abnormalities.

Therefore, given the teaching of Hair, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Wellisz, as taught by Hair to promote better bone healing and lessening cosmetic abnormalities.

With respect to claim 4, Wellisz et al disclose an implant wherein the support element has a strip-like form; as best seen in FIG.10.

With respect to claim 6, Wellisz et al discloses an implant wherein the spike extends from an end of the extension remote from the support element; as best seen in FIG.10.

With respect to claims 8, 28, Wellisz et al. disclose an implant wherein the spike comprises sharpened edges; as set forth in column 5, line 60.

With respect to claim 9, Wellisz et al disclose an implant wherein the support element defines a screw hole (33, 33a) therethrough.

With respect to claims 29-43, Wellisz et al discloses all the limitations, as set forth in column 4, lines 25-67, column 5, lines 1-67, column 6-lines 1-30; and, as best seen in FIG.10. Also, as best seen in FIGS. 1-6 of Hair.

With respect to claim 5, it is noted that wellisz et al did not teach of a lower side of the support having a concave or spherically curved at least in section; as claimed by applicant. However, in a similar art, Hair evidences the use of a fastener having a

concave or spherically-curved lower side to tightly engage the outer surface of the bone and promote gripping action.

Therefore, given the teaching of Hair, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the curved lower surface of the device of Hair in the device of Wellisz et al. side to tightly engage the outer surface of the bone and promote gripping action.

Claims 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wellisz et al. (6,511,482) in view of Hair (6,197,037) in view of Pohndorf et al. (5,904,683).

With respect to claim 10, it is noted that the above combination of references did not teach of a support element having a thickness increasing in the direction of the screw hole; as claimed by applicant. However, Pohndorf et al. evidence the use of a support element having a thickness increasing in the direction of the screw hole to strengthen the support element for receiving a screw and stabilize a bone.

Therefore, given the teaching of Pohndorf et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the increasing thickness of Pohndorf et al in the support element of Wellisz/Hair to strengthen the support element for receiving a screw and stabilize a bone.

With respect to claim 11, Pohndorf et al teach a screw hole that is spherically curved, as best seen in FIG.11.

Response to Amendment

-----Applicant's arguments with respect to claims 1,4-6,8-12,28-34,36-43 have been-----
considered but are moot in view of the new ground(s) of rejection.

Conclusion


A shortened statutory period for reply to this action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (703) 308-2252. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P Shaver can be reached on (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pedro Philogene
June 25, 2004


PEDRO PHILOGENE
PRIMARY EXAMINER